VIRGINIA WILDLIFE

DECEMBER 2003 TWO DOLLARS

Director's Column

William L. Woodfin, Jr

What a year! Despite the months of endless rain followed by Hurricane Isabel, and despite some curves thrown our way with snakehead fish, zebra mussels and monkeypox, this agency has made great strides in our mission. For those of you who are not aware of the mission of the Virginia Department of Game and Inland Fisheries, it can be found at the bottom of this page each month. Simply put, we're the folks responsible for wildlife population management, for providing outdoor recreational opportunities, and for keeping the people involved in those activities safe.

This year we introduced the Mountain Phase of our statewide Virginia Birding and Wildlife Trail. The Trail is attracting national attention and drawing thousands of visitors from all over the world. The Coastal Phase opened in 2002, and we are developing the final phase scheduled to open next year.

In addition, we were able to complete four new sighting-in ranges at Clinch Mountain, Gaithright, White Oak, and Phelps WMAs. Unlike shooting ranges, which are designed for recreational target shooting, these handicapped-accessible ranges were built to provide locations specifically for hunters to sight-in rifles.

Our new sighting-in ranges offer hunters a safe place to improve their shooting skills and to become better marksmen. They also provide an ideal location to instruct youth in safe firearm handling before going afield. And, if I may brag about our staff for a minute, three of the four sighting-in ranges were designed and built by our hard-working employees.

For information about the Department's sighting-in ranges, shooting opportunities, WMA maps, the status of our boat landings, the Virginia Birding and Wildlife Trail, and more, visit our Web site at www.dgif.state.va.us.

On our Web site you'll also find some new additions, which provide better customer service to you. In this past year we have been able to offer on-line boat registration renewal and the ability to purchase your hunting and fishing licenses and donate to Hunters for the Hungry all with the click of a mouse. I am proud to say that the Governor distinguished the Department with a 2003 Technology Award for these accomplishments.

On behalf of all those who work for and with the Virginia Department of Game and Inland Fisheries, I wish you a joyous holiday season and a Happy New Year. As this year comes to a close and a new one begins, please remember when heading outdoors or on the water, be responsible, be safe, and have fun!

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.

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About the cover: The ruffed grouse (*Bonasa umbellus*) sometimes goes by the name of mountain pheasant, thunder wings and drumming grouse. It is commonly found in central and western Virginia. The average size of an adult bird ranges from 16 to 19 inches. Their preferred habitat is deciduous and mixed forest, with dense underbrush. To learn more about the ruffed grouse and grouse hunting visit the Ruffed Grouse Society's Web site at www.ruffedgrousesociety.org. Original artwork ©Spike Knuth.

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Dedicated to the Conservation of Virginia's Wildlife and Natural Resources

TOLL Free Learning

by Ken Perrotte

When a middle school teacher and a Virginia Department of Game and Inland Fisheries wildlife biologist team up to help youngsters better appreciate the outdoors, the arrangement could be called a "marriage made in heaven."

©John R. Ford

The students who sit in Lisa Lovelace's science class at Stafford County's Rodney E. Thompson Middle School may not fully appreciate it, but their teacher has a secret weapon arming her with additional expertise and informational products about the incredible diversity found in Virginia's great outdoors.

Her husband is Virginia Department of Game and Inland Fisheries wildlife biologist Dan Lovelace. Granted, Mrs. Lovelace is a creative teacher and has plenty of other resources and wherewithal to pull together interesting programs and projects for the students, but Mr. Lovelace is tireless in helping ensure she has an unfair competitive advantage in helping young minds soak up knowledge.

The kids are the ones who benefit from this close cooperation.

Dan has always been faithful in providing Lisa ample supplies of *Virginia Wildlife* magazines, plant and animal species profiles, and other literature he's been able to find at seminars and workshops he attends. A special love child conceived by the Lovelaces is "The Outdoor Learning Laboratory (TOLL)," a place where Lisa's science students can see, smell, and feel the nature they study in their textbooks and resource material.

When Stafford County was preparing the site for the new middle school a few years ago, Dan approached Lisa about preserving a piece of land to design TOLL. He saw the pending reconfiguration of the landscape as an opportunity to preserve a small patch of earth where students could dig deeper into the underlying dynamic that governs life.

©Ken Perrotte

He and I drove to the site. We looked at the land, the architectural drawings and site plans, Lisa explained. After obtaining school concurrence, we began work, planting a variety of native grasses and shrubs around a preserved small tract of woods with an intermittent stream

Above: Lisa Lovelace points to a bluebird that flew across a pond to a group of science students.
Below: Andrew Nicolucci and Kathie Kooiman examine some of the animal skulls Lisa Lovelace keeps in her classroom.

©Ken Perrotte

and storm water retention pond. We also drafted a number of local youngsters to assist with the planting and sought out the Boy Scouts for any volunteers wanting to help as part of Eagle Scout projects.

"I was happy to help Lisa develop habitat that would attract a variety of species and, of course, this also fit nicely with my role as the wildlife biologist for this area," Dan said.

Touchy-Feely Field Trip

Students were rating the habitat at TOLL during a spring 2003 excursion. The site is just a few hundred yards behind the school. They fanned out excitedly with their clipboards and score sheets, examining the quality of the food, water and shelter for wildlife. They rated various habitat attributes on a scale of 1 to 5 and where low scores were noted, described ways to improve.

A group of youngsters were huddled around a special guest—Dan—as he gave a short lecture on non-native, exotic plants and how they can be highly invasive, competing with native plant species.

"This is a good location because several habitats; woods, wetlands and meadows, for example, are located closely together in a small area," Dan noted.

Lisa said her goal is to bring each class out to the lab six times a year.

"Sometimes we plant and evaluate habitat; sometimes we test water," she said. "We also play several of the 'Project Wild' games. We like the game 'Oh Deer' where the kids learn about deer habitat, population impacts, limiting factors and the ever-shifting balance beam of nature. Nature is dynamic; never really in balance," she said.

"I've actually placed animal skulls (real) and scat (plastic) of various animals out in TOLL. The kids have to find these and match them up. It's definitely an Easter Egg hunt of a different type," she laughed.

Help with Standards of Learning

Lisa's classroom is full of images and materials generated by the Department. The material also helps students prepare for the rigorous Virginia Standards of Learning (SOL) exams.

"Food chains, food webs, plant classifications and much more are all part of the Standards of Learning," Lisa said.

One specific SOL-related piece of indoor lab work concerning food webs instructs youngsters to find a Virginia Wildlife Calendar, cut out a picture and then research and write about that fish's or animal's habitat, enemies and prey.

Images from the calendar hang from walls and bulletin boards throughout her classroom. Beneath the color photos, though, instead of the days of the week, are the species profiles written by the students.

Virginia Wildlife magazines are stacked in a reference display. She gets additional copies and shares them with other science teachers.

Dan's my greatest source. He is always looking for displays or re-

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Above: Blair Beck carefully opens a bluebird box to check for nesting activity, while a couple of her fellow students peek around the corner.
Right: Jessica Terrell (left) and Katie Kooiman examine some of the reference materials, including *Virginia Wildlife* magazines, which Lisa Lovelace keeps in her classroom.

Above: Wildlife biologist Dan Lovelace discusses the progress of the clover and a small maple tree with (left to right) Selena Avina, Andrea Daniels and Brittany Binion.
Below: Lisa Lovelace leads a discussion in the tiny amphitheater nestled in The Outdoor Learning Lab's small piece of woods.

source material, whether it's from people cleaning out their desks to conferences he attends," Lisa said.

Thirteen-year-old Mia Joshi said, "We use the *Virginia Wildlife* magazine to look up animals and get information for our species profile. You can get a lot of ideas for things we can do on our projects. We get to do a lot of interesting experiments and hands-on activities."

Erin Kenderish added, "One of the nice things is that after we're done using *Virginia Wildlife* for our research, we can just read it!"

Tiera Thompson, 13, likes the learning approach of Lisa Lovelace.

"You're not just sitting in a classroom, like math or something else. You're able to get out and learn about, and help, the environment while you're learning," she said.

A Bluebird Moment

Meanwhile, back at the TOLL, students were inspecting bluebird boxes for nesting activity. Lisa provided the school's shop class with the plans to build 25 boxes. Her students then placed them around the area.

Most of the boxes were empty, but then Lisa exclaimed, "Hey look, there's a bluebird."

A group of youngsters, clutching their Audubon field guides, gathered around her gazing toward the pond and the bird. This seemingly simple moment, is one many people take for granted. But, for Lisa Lovelace's students, there's considerably more awe, respect and wonder, courtesy of the knowledge they gain in her classroom and their Outdoor Learning Lab. ☐

Ken Perrotte is a writer and outdoor columnist for the Fredericksburg Free Lance-Star. *He lives in King George, Virginia.*

©Ken Perrotte

by Bob Gooch

A blur of activity! At my feet! And then the roar of a thousand wingbeats as the frightened bird made a hasty retreat. I had almost stepped on it! Somehow I managed to bring my light Remington automatic 20-gauge shotgun to my shoulder, and fling a shot at the fast-disappearing bird. Nothing! Then another. Still nothing! That was all the opportunity I had. And that had not been much of one. Still, a crack wingshot might well have scored and pocketed a fat ruffed grouse from the steep side of that Madison County mountain.

I consider myself a fair wingshot. At least I have taken a great number of birds on the wing. Mostly quail, but also some ruffed grouse, pheasants, Hungarian partridge, blue grouse and other game birds all over North America—particularly the beloved bobwhites in my native Virginia. Doves and ducks too, but that's a different kind of wingshooting. Mostly pass shooting—not shooting at flushing birds.

Of all the upland birds I have hunted I consider the ruffed grouse

The author with a beautiful Virginia ruffed grouse. Note the richer brown color as opposed to gray birds of the north.

Drumming Up

For the upland bird hunter stalking grouse in the Southern Appalachians is winter's ultimate pleasure.

the toughest to hit. Caught and flushed in the open, it would not be a difficult shot, but the fleeing bird has a habit of quickly putting a tree or a hemlock branch between it and the hunter. And that is when most hunters miss. You don't get many clear open shots at grouse.

And I must admit that I have missed often over many years of bird hunting.

Most of those misses have been at ruffed grouse flushed from the Virginia mountains and foothills from the Blue Ridge Mountains west. I rank the popular Virginia grouse the most challenging. I missed cleanly on that shot—as I had missed numerous times over the seasons, and if I am lucky enough to continue hunting them, I will miss many more. On the other hand I have bagged my share of ruffed grouse, and hope to pocket a few more. Those misses are part of the game and without them grouse hunting would not be the challenge, and the fun it is. Many Virginia grouse hunters measure their success by the number of birds they flush instead of the number that find their way to their game pockets.

That's grouse hunting in Virginia and throughout the Southern Appalachians. No other hunting is quite like it.

The ruffed grouse is a bird of the forests, mostly the hardwoods, but you don't find them often in the deep woods. Two friends and I learned that the hard way while hunting in the sprawling George Washington and Jefferson National Forest a number of years ago. We had scoured those rich forestlands for most of a winter morning with no success. Then we stepped into the edge of a clear-cut. And flushed a grouse! We were so surprised that none of us got off a shot. Encouraged, we worked that clear-cut hard for the remainder of the morning and managed to bag a couple of birds. A couple of birds spell success in hunting Virginia grouse. The daily bag limit is three, but few hunters manage to bag limits with any degree of consistency.

Grouse, like most game animals, tend to favor the edges such as streamsides, opening in the forests, or other cover that offers a better chance for food. Abandoned farms and orchards are ideal. Fruit, leaves, and buds make up much of the bird's diet. In Virginia wild grapes are a favorite. I always keep my eyes open for the tiny wild grapes when hunting.

I like to hunt grouse in the snow. For one thing their chicken-like footprints in the snow tell me I am in grouse country. I don't know why, but I have enjoyed some of my best hunting in snow-covered mountains. One particularly good hunt came just across the border in the West Virginia mountains. The going was so tough I had trouble convincing my West Virginia host that we should tackle that snow. Later, knee-deep in the snow in a deep hollow, I appreciated his reluctance. Despite that we were able to put up a good number of birds.

There was another hunt in the snow-covered Madison County mountains when my hard-working little English setter went on a sudden point, but skidded in the snow and flushed the bird wild. I managed to get off a shot and thought I had missed. "Think you got him," said my partner. I shook my head, but then his dog, a Brittany spaniel, came racing out of the thick cover with my grouse firmly in his mouth. "Jack has him!" exclaimed my partner. Between the two dogs we had a real hunting team and we went home that snowy day with a trio of birds.

There was another time when a friend and I were hunting in a developing snowstorm. My setter went on a sharp point by a stream at the foot of a steep cliff. I called my hunting partner over. We eased up behind the staunch little setter and when the bird flushed we both shot and the bird fell into the snow several yards up the cliff. Bo, my little setter, dashed up the cliff and waded back through the snow with the bird in his mouth.

Business

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Grouse hunters know that if you want to get close to a bird you have to get into the thick of things. It is often the kind of habitat that grouse prefer.

Many successful grouse hunters hunt without dogs, but a good dog can add a lot to the pleasures of a hunt. Dogless hunters have to recognize likely cover and work through it slowly and follow a zigzag route. Fellow outdoor writer Jerry Almy of Woodstock has been hunting Virginia grouse successfully without a dog for almost three decades. He likes thick patches of blowdowns, grapevines, greenbrier, laurel, rhododendron and honeysuckle.

Successful grouse hunters don't rush through good cover. They work it slowly and thoroughly. The birds "sit tight." A rushing hunter can walk within a few feet of a resting bird, well protected by its camouflage color, and not flush it. A good dog, of course, could pick up its scent, but hunters who do not use dogs learn to use a walk-and-pause approach. Moving slowly for a few feet and then pausing for a minute or two. A sitting grouse is well aware of the hunter's presence, and seems to know that so long as the hunter is moving he is no threat. It's that pause that frightens the bird, and it is then that it often flushes. The "stop-and-go" hunter is ready for a shot when he pauses.

According to the authorities, there are at least 11 subspecies of the ruffed grouse, but the one we hunt in Virginia, *B. u. umbellus*, is brown in color. Those found to the north tend to be grayer as compared to our Virginia birds. In other respects the birds are much the same—and all are a challenge to hunters. In much of the birds wide range the populations seem to go up and down in cycles, the lowest populations being at the bottom of the cycle. The late Dick Cross, however, who spent most of his career as a wildlife biologist, said he didn't feel Virginia grouse were subject to that cycle. It is apparently more evident to the north where heavy snows and cold weather may have an adverse effect on the birds.

A beginning grouse hunter who has spent years hunting bobwhite quail probably already owns an appropriate gun for grouse. First consider the target. A grouse flushes wildly and often unexpectedly. It is within shotgun range a brief few seconds. Not minutes. Seconds. That calls for fast snap shooting.

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Using dogs is a real plus when hunting grouse. Another advantage to locating grouse is following their tracks in the snow. Below: Grouse blend in well with their natural surroundings and are near impossible to see until you walk right up on them. Hunting with snow on the ground makes seeing them a whole lot easier.

With your eye on the fast disappearing bird you bring your gun to your shoulder and hit the trigger. Hopefully you are on the target. There is no time to sight down the barrel and pick up the bird—as you might do when hunting quail. You get your eyes on the bird—both eyes open—bring your gun to your shoulder and shoot. The best grouse gun is a fast swinging one. Its barrel is short as you are often in thick cover with limited room to swing. The norm is 26 inches, but even a shorter barrel offers advantages. Just don't drop below the minimum legal length of 18 inches! I suspect 24 inches is the minimum most hunters want to hunt with. Generally 26 inches seems to be the preferred length. A light gun is easiest to swing and less of a burden when working the thick cover in rugged mountain country. Gauge is a matter of personal preference. A light 20-gauge might be the overall favorite among Virginia grouse hunters though you see many 12-gauge doubles in the mountain grouse country. Regardless of the gauge you choose it should have an open choke. This is not long-range shooting, and you need a good spread of shot for those close-range targets. I suspect most hunters shoot improved cylinder chokes, but a skeet bore would be a

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Clinch Mountain Wildlife Management Area is an excellent location for pursuing grouse. Hunting grouse in an area like this requires that you be in good physical shape.

better choice. The ruffed grouse is not a tough bird to bring down with a well-placed shot.

Over the years I have hunted mostly with quail loads when switching from the lowland quail to the mountain grouse. This usually meant size 8 field loads. If hunting specifically for grouse, however, I usually pick up a box of size 7½ field loads. Some hunters go with the heavier size 6. It's mostly a matter of personal preference.

While grouse are found in flat and rolling woodlands to the north, in Virginia they live mostly in the mountains though I have bagged few over the years while hunting quail in the rolling foothills that stretch east in Virginia. I believe Mike Fies, in his quail surveys, calls this the western piedmont region. I have a friend who has hunted quail in the Farmville area for years and he bags an occasional grouse. If a good bird dog knows the difference between a grouse and a quail, it doesn't so indicate. Both birds apparently smell good and the dog handles them alike. While there are a few grouse in the rolling Blue Ridge foothills or the western piedmont region, hunting them there is hardly worth the effort. You could hunt all week and not flush a bird. Taken on quail hunting trips, however, they go into your memory as a rewarding experience.

From the eastern slopes of the Blue Ridge Mountains west, however, you are in ruffed grouse country. Ole ruff is king of the game birds in that vast country, but trying to point a newcomer to good hunting is risky. I suppose you might say their locations are spotty.

Some of the wildlife management areas are good. I chanced upon a hunter in Abingdon a few years ago when a proposed giant reservoir was threatening some good Southwest Virginia grouse country. The hunter was concerned. "There is good grouse hunting in the Hidden Valley Wildlife Management Area," he told me. Apparently the proposed reservoir threatened the popular area. Most of the wildlife management areas in the western part of Virginia offer good grouse hunting. Another is the big 25,000-acre Clinch Mountain Wildlife Mountain Area, a region of rugged mountains and lush meadows and valleys.

In the eastern part of the state the rugged Rapidan Wildlife Management Area in Green and Madison counties along the eastern slopes of the Blue Ridge Mountains offers good grouse hunting. The area receives a lot of hunting pressure, however, and one way to avoid it is to hike well off the road, a half-mile or so.

Virginia grouse hunters are fortunate in that between the two national forests and several wildlife management areas there are over a million acres of public hunting land on which to pursue their favorite game bird. Quail hunters, on the other hand, have to rely heavily on private land in the eastern part of the state where public hunting land is more limited.

Despite that abundance of public hunting land in the western part of Virginia, all of that land is not equally productive of good grouse hunting—even though just about all of it is a possibility. Few experienced hunters, however, are going to direct you to their favorite coverts. But keeping in mind the bird's preferred cover and food and with a little hard work you can uncover your own choice hunting area.

That's much of what hunting is all about. ☐

Bob Gooch has been a regular contributor to Virginia Wildlife *magazine for over 30 years. He is an outdoor columnist for numerous newspapers and has authored many books on hunting and fishing in Virginia.*

Keeping Your Eye on the Target

©Dwight Dyke

Common sense and following the rules of firearms safety are helping to make shooting sports a safe and fun outdoor activity that the whole family can enjoy.

by Jim Crosby

For me, it started when my great-great grandfather took me squirrel hunting at about age ten. I didn't even get to shoot on those first trips into the woods. I only got to fetch the catch that fell from the trees. He carried a 22-caliber, Remington Model 12, pump with open sights, and every shot produced a squirrel for the gravy pot. He wasn't one to waste a word or a single round. He didn't participate in idle chatter so when he spoke, you knew to listen-up because it was going to be important. When he took aim, you noted the direction to which you would dash to retrieve the game. He didn't take many companions on his hunts and you didn't get a second invitation if you talked or made too much noise. I passed the test not because I was so smart, but because I was too intimidated to make a sound. I became his silent partner in the woods.

After he died some 50 years ago, I was given the rifle in recognition of our partnership. I am still shooting holes in paper with it today as a member of the Rivanna Rifle & Pistol Club of Albemarle County.

Growth In The Shooting Sports

Along with millions of my fellow Americans, I own guns for the same reason others own golf clubs, tennis racquets, off-road bikes or hang gliders. Today, the shooting sports are an integral part of the American experience. Explorers and woodsmen tamed our nation, and while superb marksmanship is no longer a required survival skill for its residents, Americans have made it a very popular recreational pursuit. According to a recent nationwide study, "participation in the shooting sports is on a par with golf. It already aces tennis, mountain biking and softball." I knew it was growing in popularity from the growth our own club has experienced over the past ten years, but had no idea just how much until I started to analyze the data.

Who And How Many Shooters

A 1999 recreational study found "over 26 million Americans take part in the shooting sports." You may be one of them just as I am. Along with hunting, we find shooting enthusiasts toting muskets at historical re-enactments; reaching for vintage six-shooters in cowboy action shooting competitions; and teaming up at skeet, rifle and pistol clubs all across the country—men and women alike. Since 1988, according to the National Shooting Sports Foundation (NSSF), target shooting has seen a whopping 80 percent increase in participation by women. Some 7.5 million now enjoy rifle, shotgun and handgun shooting games—about the total number of U.S. skiers.

Shooting Sports = $

Surveys by the U.S. Fish and Wildlife Service and others show that shooting sports pump over $30 billion through our national economy annually—a total that exceeds the annual sales of Fortune 500 giants like Coca-Cola and Microsoft. A listing from the NSSF Web site (www.wheretoshoot.org) shows 50 locations in Virginia where one can shoot. The listing includes everything from private clubs for members only to specialty ranges, public shooting ranges and ranges operated by private enterprise.

©Dwight Dyke

According the National Rifle Association of America there are over four million women who enjoy target shooting and their numbers are rising.

Shooting Sports For Our Youth

In addition to men and women, the sport is attractive to the youth of America. Nationally, the National Rifle Association and 4-H Clubs of America sponsor youth training and competition that involves thousands of young people across the country.

These organizations offer specialized programs to introduce the shooting sports to youngsters. These programs are taught by certified instructors and emphasize safe gun handling and the development of shooting skills. Among the organizations that offer programs for beginning shooters are: 4-H Shooting Sports, Boy Scouts of America Venturing Program, YMCA Summer Camp Shooting Sports Program,

©Jim Crosby

Educating people, young and old, on proper firearm safety has helped to make hunting and target shooting one of the safest of all sports.

American Legion Airgun Program, National Rifle Association Education & Training Division, State Rifle & Pistol Association, and local gun clubs.

For example, the national 4-H program certifies hundreds of adult volunteer instructors every year who return home to work directly with 4-H members. This program alone reaches more than 150,000 youngsters each year with introductory training.

The President's Council on Physical Fitness offers awards for teens in rifle shooting. A growing number of high schools support shooting teams and programs and many schools of higher learning offer scholarships in the shooting sports.

Annually, an All-American Rifle Team is named from the nation's best high school and collegiate shooters. Talented young shooters under the age of 20 are selected to join the U.S. Shooting Team's junior Olympic program.

For information on qualifying for junior training camp at the Olympic Training Center, write to: Director of Shooter Development, U.S. Olympic Shooting Center, One Olympic Plaza, Colorado Springs, CO 80916.

You can learn how to qualify for the President's Council on Physical Fitness rifle awards by contacting: The President's Council on Physical Fitness and Sport, 200 Independence Ave., SW, Humphrey Building, Room 738H, Washington, DC 20201.

Loading Your Own Ammunition

The shooting sports have developed a very interesting adjunct activity. Reloading your own cartridges and shot shells has developed into a hobby of its own. Shooters reload for two distinct reasons; 1.) They can cut the cost of buying factory loaded ammunition by as much as 75 percent which allows shooting three times as much ammunition for the same expense; and 2.) Serious shooters like to load their own combinations of powder and bullets to push accuracy beyond that attainable with factory loads.

Reloading is a tedious and very serious activity because it involves mixing explosives, usually in a home environment. Those interested in establishing their own reloading operation should seek the council of experienced reloaders with their decisions about equipment, supplies and techniques for safety and accuracy.

Two Basic Categories of Shooting

You can divide the shooting sports into two very basic categories —hunting and target shooting.

Hunters spend $11 billion a year on equipment, over $5 billion on travel and $4 billion on membership fees, leases and licenses. Nationally, over 986,000 jobs are supported by the industry—more people than work at Corning, Hewlett Packard and AOL/Time Warner combined, according to the National Shooting Sports Foundation.

According to *Fortune* magazine, "The dollars spent by hunters pack special oomph, because they hit

©Jim Crosby

©Jim Crosby

Top: Competitive shooting has become very popular among shooting sports enthusiasts. Action shooting can involve quickly moving from one location to another firing at fixed or moving targets, while target shooting (bottom) is normally done from a fixed location shooting at a stationary target.

small towns far from the interstate. There, merchants look to hunting season the way Macy's looks to Christmas."

Statistics show the average hunter spends $1,500 on equipment annually and hunters' love of the outdoors influences the sales of everything from SUVs to pup tents.

In Virginia, hunters tromp through the woods, across the meadows and paddle the streams in search of fowl, as well as large and small animals. As development increases and wildlife habitat shrinks, hunting overall is on the decline across the country as indicated by the diminishing sales of hunting licenses.

An Alternative To Hunting

Many shooters do not hunt and enjoy punching holes in targets or breaking clay pigeons instead. The sport of target shooting is increasing as memberships in shooting clubs grow annually.

Shooting clubs can offer extensive facilities for the avid shooter to enjoy the sport in a safe environment. For example, the Rivanna Rifle & Pistol Club in Albemarle County has a fully equipped indoor range with electrically driven target holders on ten shooting stations. The range is attached to a large meeting and training room. The club has fields for both skeet and trap shooting outdoors, along with a bull's-eye pistol range, high-powered rifle range, plinking range and ppc course. This club even offers an archery range.

The Civilian Marksmanship Program

The Civilian Marksmanship Program (CMP) promotes firearms safety training and rifle practice for all qualified U.S. citizens with special emphasis on youth.

The U.S. Congress created the CMP. From 1916 until 1996, the U.S. Army administered the CMP. The National Defense Authorization Act for Fiscal Year 1996 created the Corporation for the Promotion of Rifle Practice & Firearms Safety, Inc. to take over administration and promotion of the CMP. This organization is a tax exempt, not-for-profit 501 [c](3) organization that derives its mission from public law.

The CMP offers surplus military rifles and pistols at very favorable prices to those who can qualify for the purchase. They also offer training and opportunities for competitive shooting. The CMP operates through a network of affiliated shooting clubs and associations that cover every state in the U.S. These clubs and associations offer firearms safety training and marksmanship courses, as well as the opportunity for continued practice and competition. Their Web site (www.odcmp.com) can be accessed for additional information. □

Jim Crosby is an avid shooter and member of the Rivanna Rifle & Pistol Club and the National Rifle Association.

Shooting Ranges In Virginia

In addition to the clubs and commercial ranges, the Virginia Department of Game and Inland Fisheries has public sighting-in ranges available at the Amelia and Chickahominy Wildlife Management Areas. These ranges are built with safety and accuracy in mind, and have posted restrictions.

The **Amelia Range** is a six-station, bench rest-only facility, with 25, 50 and 100-yd. target points. You may sight in any caliber rifle on the range, including black powder rifles, along with shotguns with slugs. No pistols are allowed.

The **Chickahominy Range** has a 10-station bench rest rifle range with 25, 50 and 100 yard target points and a 10-station pistol range with 15, 25 and 50 yard target points. Be sure to bring your own paper targets, cardboard backing, clothespins and tape. Both ranges are open six days a week (hours may vary) and they are closed on Wednesdays for maintenance. No reservations are required and there are no fees. Shooters are limited to one hour of shooting when the range is full. At the Amelia facility a shotgun range for hand-thrown clays and an archery range, are also available free of charge. For directions and additional information check the Department's Web site at www.dgif.state.va.us.

©Dwight Dyke

George Washington and Jefferson National Forest Shooting Ranges

The **Blacksburg Shooting Range** is north of Blacksburg. Take U.S. Route 460 north to Route 621, turn right and follow the signs to the shooting range on the left. This range offers two facilities; an 18-position rifle/pistol range designed for firing at stationary targets and a single position shotgun (trap) range. You can contact the New River Valley Ranger District, Blacksburg Office, (540) 552-4641.

The **Wythe Shooting Range** is near the Stoney Fork Campground on Route 717. Take the Route 717 Exit off I-77 (near Big Walker Mountain Tunnel) and turn west onto Route 717. Go approximately 500 yards and turn right onto the road that leads to the state maintenance building. Before reaching the building, turn left, and then go about a half-mile to the range. The range includes six 25-yard lanes and four 100-yard lanes. Targets can be set at seven, 15 and 25 yards on the 25-yard lanes, seven, 15, 50 and 100 yards on the 100-yard lanes.

This shooting range will be open seven days a week from dawn to dusk with no fee. The Forest Service will supply the target frames. Shooters must bring their own target sheets and tape or staple gun to affix targets to the frames. A donation box is set up at the range to help defray the cost of the target frames, which must be replaced each month. Contact the New River Valley Ranger District, (276) 228-5551.

The **Hite Hollow Shooting Range** is near Augusta Springs. This range is open from sunrise to sunset every day for firing rifles, pistols and shotguns at stationary targets. Moving targets such as clay pigeons and bottles are prohibited. From Staunton, take Route 254 west to Buffalo Gap, then Route 42 south about eight miles to Augusta Springs. Take Route 845 about a half-mile to Forest Development Road 82, and follow this road about one mile to the range. Contact the Deerfield Ranger District, (540) 885-8028.

The **West Side Shooting Range** is open year-round, it provides shooting lanes of various lengths, covered shooting benches and a parking area. The range is located on Forest Development Road 151, about one mile north of the junction of FDR 151 and Route 33. The turnoff is about one mile east of the Brandywine Lake Recreation Area, in West Virginia. Contact Dry River Ranger District, (540) 828-2591.

The **Low Moor Shooting Range** is located between Clifton Forge and Covington. Exit I-64 at Low Moor (Exit 21), go past entrance of the Allegheny Regional Hospital, go through railroad overpass, turn right onto Route 616 (Rich Patch Road) and follow approximately 1.6 miles. Turn left onto FDR 616 at the sign to the shooting range just past the Virginia Power Company sub-station on the left. Six rifle benches and three pistol benches are under roofed shelter. Features include rifle range-stationary targets at 50 and 100 yards, and pistol range-stationary targets at 25 yards. Moving targets, such as clay pigeons are prohibited, as are glass bottles. Shooters must supply their own targets and are asked to keep the range clean of litter by taking away all target materials with them. The parking lot accommodates 5 vehicles. The range is open all year round and is not handicapped-accessible. Contact James River Ranger District, (540) 962-2214.

The **Pott's Slope Shooting Range** is located on the right of Route 311, approximately seven miles north of New Castle, Virginia; this range is handicapped-accessible with a covered shooting area. The range features nine lanes for rifle/pistol use with stationary targets at 25, 50 and 100 yards. Contact New Castle Ranger District (540) 864-5195.

©Jim Crosby

The **Bath County Shooting Range** has 10 covered benches for shooting at 50 and 100 yards. This range provides an excellent place to zero-in your firearms. The range is located off Route 609 in Bath County approximately five miles east of Warm Springs. From Warm Springs, take Route 39 east to Route 609, turn left and go approximately 1.25 miles to the range entrance on the right. Generally the ranges are open from sunrise to sunset every day for firing rifles, pistols and shotguns at stationary targets. Moving targets are prohibited. There is no fee collected for use of the range, but you may have to wait your turn. Contact Warm Springs Ranger District, (540) 839-2521.

A couple of important facts to keep in mind as you plan your visit to the National Forest; Firearms may be discharged for target practice only at established shooting ranges. Firearms may be discharged in the general area for the purpose of hunting during the open season. Discharging a firearm in a developed recreation site is dangerous and prohibited. For more information, contact the George Washington and Jefferson National Forest Headquarters at 5162 Valley Pointe Parkway, Roanoke, VA 24019, (540) 265-5100. □

Wild in the Woods

Bird Feeding Basics

by Carol A. Heiser
illustrations by Spike Knuth

Americans spend millions of dollars attracting birds to their yards and thousands of hours watching them with delight and fascination. Bird feeding is fun: it gives many people an opportunity to see birds up close, enjoy their beauty, and learn about their interesting behavior. A small bird-feeding station can also be a simple way of introducing children to nature. However, it is not necessary to supply extra food for birds if the habitats around your home and neighborhood contain a diversity of shrubs and trees that produce seeds, berries, other fruits and flowering plants that attract insects. We would probably also have fewer problems with unwanted wildlife species if there weren't so many feeders around. Is there a compromise? Yes: feed sparingly and concentrate your efforts on those times when natural food sources are definitely in shorter supply, such as during snowstorms or in late winter. Spring and summer feeding can be rewarding, too, when birds are nesting and must feed hungry young.

Seed Types

Black-Oil Sunflower: by far the best source of protein and fat, birds favor this seed over the striped sunflower; used by cardinals, titmice, nuthatches, grosbeaks, finches etc.

Striped-Oil Sunflower: a larger sunflower seed, not as preferred as the black-oil type but still okay to use.

Millet (proso): the little round white and red seeds found in a typical bird mix; said to be favored by mourning doves and sparrows, although many people report that birds scatter and waste the white seeds as they pick out the sunflowers.

Above: Platform feeders are easy to build and offer a place for larger birds to feed. Previous page: Tube feeders made from plastic and filled with sunflower seeds will draw various birds, including cardinals and the common house finch. Place thistle seed in a tube feeder, with smaller feeding holes, and you have the perfect American goldfinch feeder.

Safflower: harder to find in the stores; use ONLY safflower seeds, no others, if you want to discourage starlings and squirrels.

Thistle: very small, thin black seeds; because of their size and the additional labor required to harvest them, thistle seed tends to be very expensive; attractive to finches.

Cracked Corn, Peanut Hearts, Oats, Raisins, etc: there are many optional food sources that attract sparrows, juncos, mockingbirds and other species. Most of these foods also attract squirrels and other mammals like deer or raccoons, which can become a neighborhood nuisance. Therefore, use "gourmet" bird mixes sparingly.

Seed "Mix" or Blend: this is the cheapest generic mix that is easy to find at the average grocery store or mammoth mart. But you get what you pay for: these mixes usually contain mostly millet and scant sunflower and are therefore not the best bang for the buck, because most of the seed is not eaten. Better to place your dollar on the opposite proportions, that is—a big bag of black-oil sunflower seeds with a few handfuls of the millet mix thrown in.

Feeder Designs

Choose your feeder based on what type of birds you want to attract and what type of seeds they prefer. Pay attention to quality of construction and durability—a good feeder should last several years, especially if it's protected from squirrels and the weather. Metal is usually strongest and holds up best to the elements, but avoid feeders with sharp edges; PVC-grade plastic is fairly tough and works well if the seed openings are protected by a surrounding piece of metal; wood is okay but doesn't last as long unless periodically re-treated on the outside with preservative or hung beneath a sheltered area.

Platform feeder: holds millet and other seed in an uncovered screen tray, which allows precipitation to pass through. Feeder can be suspended from a tree or pole, or made to look like a table that sits on four legs about 10 inches off the ground; useful for mourning doves and juncos.

Hopper feeder: a covered box that dispenses seed from slots in the sides; it can be mounted on a pole or suspended from a tree; good for cardinals and other birds which prefer sunflowers or a seed mix.

Thistle (or "Niger") feeder: vertical tube, usually plastic, with tiny slits in the side to dispense the seed. Use one with short perches to attract finches. Plastic mesh bag feeders are also available.

Suet feeder: a screened square or plastic mesh bag that holds hardened, rendered fat that's relished by woodpeckers, nuthatches, chickadees, and many other species. Offer suet in winter, because it can become rancid in warm weather. Also, birds consume the fat and store it in their bodies as a source of energy for warmth. True suet—which is the fat from around the kidneys of a livestock animal—may be available at a butcher shop; it can be rendered down (melted), poured onto a cookie sheet, refrigerated to harden, and then cut into squares. Or, you can purchase suet commercially in ready-made cakes. You can also put bacon grease (melted down and then chilled in fridge) or lard in mesh bags like the ones used for onions. Try the "Bird Mix Recipe" on the next page for another variation.

Hummingbird feeder: a glass or plastic bottle containing sugar water that mimics nectar. Hummingbirds rely primarily on flowers for nectar and tiny insects; sugar water is merely a temporary, quick source of supplemental energy. [Mix 1 part sugar to 4 parts water in a pan, boil on a stove to kill spores in the sugar, then allow to cool to room temperature. The sugar water does NOT need to be colored red—it's the plastic trim on the feeder that should be red to catch the birds' attention. NEVER USE HONEY in the feeder, this contains a fungus that can harm hummingbirds.] The bottle usually screws into a red base designed to look like flowers; each "flower" has an opening through which the hummingbird can sip the "nectar." Look for a design that includes bee guards (a type of screen that goes over the openings) to discourage wasps. An ant trap is also effective—this is a small cup that is hung on the wire above the feeder; you put water in the cup so that ants trying to get down to the feeder will fall in the water. Hummingbird feeders are sometimes visited by red-bellied woodpeckers and yellow-bellied sapsuckers. REPLACE the sugar solution once a week to avoid spoilage.

Bluebird feeder: purchase mealworms from a local pet store and place them in a small clay or ceramic dish on a porch railing, or attach to a stand. Once bluebirds find the mealworms, they'll keep coming back for more. You can easily "raise" more mealworms by keeping some in a plastic container filled with dry oatmeal and a piece of apple or lettuce for moisture; the container will need air holes on top for ventilation.

Keep Feeders Clean

Since birds that congregate at feeders can more easily transmit diseases to each other while in close contact, clean your feeders once a month with a solution of one part chlorine bleach and nine parts of water (do not use bleach only). Let the solution come in contact with all surfaces for a few minutes, rinse well, then allow to air dry. Also, avoid letting food waste accumulate on the ground—periodically rake and remove the excess.

Bird Mix Recipe

1 part flour
3 parts yellow corn meal
2 parts bacon grease or lard (in solid form)

1. In a large bowl, mash the above together with a fork or your fingers until well-mixed into a paste.

2. To this mix you can add a variety of other, optional ingredients, such as the following: a few heaping tablespoons of peanut butter; a handful of raisins; a handful of shelled peanuts; a handful of bird seed; pieces of dried fruit; a handful of dry oatmeal; etc.

3. Smear the mix onto tree trunks or on the tops of fence posts; or, place in a mesh bag or commercial suet feeder and suspend from a tree limb.

Fruit in Summer

Fresh fruit can sometimes attract birds like tanagers and orioles which are only here for the breeding season in summer. Catbirds, robins, wrens and other bird species might visit fruit sources, too. Impale half an orange or apple on the twig of a tree or on a nail, or on the peg of a feeder designed for this purpose. Steam or soak raisins or currants, and offer them in shallow containers; waxwings and mockingbirds favor these. Discard uneaten fruit regularly to avoid attracting flies.

A hopper feeder allows seeds to fall, as needed, from slotted sides making it a perfect feeder for larger birds like the northern cardinal.

Hummingbird feeders normally have a plastic or glass bottle, which is filled with sugar water. It is important with all bird feeders to clean them regularly.

Baffles and Squirrel-Proofing

To protect your feeders from squirrels that try to jump on top, install feeders at least 6 feet off the ground on a pole placed at least 10 feet away from trees, and cover the top of the pole with a large, upside-down, dome-like baffle. On the pole below the feeders install a conical or tubular-shaped baffle to keep snakes, raccoons and squirrels from climbing up. Another method is to suspend feeders from a long wire strung between two poles or trees, then slide lengths of PVC pipes or 2-liter bottles over the wire. Purchase feeders that are specially designed to deter squirrels. Examples include: hopper feeder with a specialized spring mechanism that closes the hopper when a squirrel alights; a feeder with a built-in electrical shocking device; or a feeder that is totally enclosed within a plastic-coated hardware cloth.

Above: The perfect draw for a hungry downy woodpecker is a small wire basket or screened piece of cloth filled with rendered fat, or suet mixed with various nuts and seeds.
Right: Growing sunflowers can help to brighten up a yard and offer a beneficial food source for hungry birds.

Discourage Mammals

Avoid feeding old bread and other kitchen scraps, as these items attract starlings and crows. Do not encourage mammals like deer and raccoons to feed on corn, apples, etc. in your yard—these species can become a neighborhood nuisance. Keep all bird seed stored in tightly covered containers out of the elements. Avoid leaving cat food and dog food outside. And one other important reminder: Keep Cats Indoors! Cats are non-native predators that yearly kill millions of birds, small mammals, reptiles, and many other wildlife species. Cats should not be allowed to roam free to wreak such destruction; a bell around the neck does nothing to diminish a cat's predatory successes.

Learning More

Books

The Bird Feeder Book: How to Build Unique Bird Feeders from the Purely Practical to the Simply Outrageous, by Thom Boswell; c. 1995, Sterling Publishing; 144 pp.

The Bird Feeder Book: the Complete Guide to Attracting, Identifying and Understanding Your Feeder Birds, by Donald and Lillian Stokes; c. 1987, Little, Brown and Company, NY; 90 pp.

Bird Feeders: Step-by-Step Project Plans, by Ed Baldwin; c. 1996, Creative Homeowner Press; 104 pp.

Dick E. Bird's Birdfeeding 101: a Tongue-in-Beak Guide to Suet, Seed and Squirrelly Neighbors, by Richard E. Mallery; 1997, Bantam Doubleday Dell; 224 pp.

Enjoying Bird Feeding More, by Julie Zickefoose; c. 1995, Bird Watcher's Digest Press, Marietta, OH 45750; 32 pp.

The FeederWatcher's Guide to Bird Feeding, by Margaret A. Barker and Jack Griggs; c. 2002, HarperCollins Publishers.

How to Attract Birds, by John V. Dennis and Michael McKinley; c. 1995, The Scotts Company; published by Meridith Corporation-Ortho Books, Des Moines IA 50309; 96 pp.

My Recipes are for the Birds, by Irene Cosgrove; c. 1999, Doubleday; 80 pp.

Wild About Birds: The DNR Bird Feeding Guide, by Carrol L. Henderson; c. 1995, State of Minnesota, Department of Natural Resources, St. Paul MN (1-800-766-6000); 278 pp.

Web Sites

Bird Source (Audubon)—sponsors of the Great Backyard Bird Count, the national Christmas Bird Count, and e-Bird (a database for recording your observations), at www.birdsource.org/.

Bird Watcher's Digest—interesting FAQ's, articles, the how-to's of bird feeding, and much more about backyard birdwatching, at www.birdwatchersdigest.com/.

Project FeederWatch (Cornell Lab of Ornithology)—tons of good information "About Birds & Bird Feeding," at www.birds.cornell.edu/pfw/AboutBirdsandFeeding/abtbirds_index.html.

Wild Birds Unlimited—click on "Education" for pages of tips and facts about bird feeding and bird behavior, at www.wbu.com/. ☐

Carol A. Heiser is a Wildlife Habitat Education Coordinator with the Virginia Department of Game and Inland Fisheries.

Virginia Naturally

Virginia Wildlife Outdoor Catalog

2003 Limited Edition *Virginia Wildlife* Knife

The fourth in our series of limited edition *Virginia Wildlife* knives has been customized by Bear Cutlery and made in the USA. Each knife is serial numbered and has *Virginia Wildlife* 2003 etched on the blade, an American eagle is engraved on the front bolster. This attractive folding knife has genuine bone handles and is approximately 8 inches when fully opened. Each knife comes in a solid cherry gift box with a collage of eagles custom engraved on the box cover. Limited quantities of our 2001 and 2002 edition, also gift boxed, are still available.

$75.00
Item # VW-50

Photos by Dwight Dyke

Virginia Wildlife OUTDOOR CATALOG

Book Clock

New for 2003, this decorative book style clock is crafted of solid cherry wood beautifully engraved with a vivid wildlife scene on the book side of the clock. The clock face is of old world décor, a collectors delight. Clock is 5 ½" x 8 ½" when opened. $29.95

Item # VW-53

Pocket Timepiece

Once again VDGIF offers our elegant Timepiece. Each watch has been crafted especially for VDGIF by the Jules Jurgensen Watch Company. These fine collectables are available with either a stag or an eagle, and each watch carries the VDGIF logo on the dial.

Very limited quantities available. Watches are sold on a first come basis. $59.95 or two for $100.00

Item # VW-11 (Stag) VW-12 (Eagle)

Five piece Coaster Set

Made of solid cherry. This attractive set of 4 wooden coasters is attractively packaged in a wooden box custom engraved with a cardinal on a dogwood branch. $19.95 Item # VW-34

Yellow Lab Pups Tapestry Throw

Created from a photograph by Virginia photographer Dwight Dyke. These five Lab pups lay about in the warmth of their basket alongside the tools of their trade. This tapestry throw created exclusively for VDGIF is triple jacquard woven of 100% cotton, machine washable and measures approximately 52" x 69". $39.95

Item # VW-35

Buckles

Our 2003 bass and duck belt buckle collection is crafted of solid pewter with *Virginia Wildlife* engraved at the bottom of the buckle. Each buckle comes in a custom gift box with the VDGIF distinctive logo displayed. $9.95 each

Item #VW-51 Bass VW-52 Duck

Matching Yellow Lab Pups Tapestry Pillow

$14.95 Item # VW-36

Photos by Dwight Dyke

Virginia Wildlife Caps

Hats off to the new *Virginia Wildlife* caps that feature three unique designs. Each cap is 100% cotton, size adjustable and embroidered with the *Virginia Wildlife* magazine logo. $11.95

High profile - deer – Item # VW-40
Low profile - deer – Item # VW-39
High profile -bass – Item # VW-38
Low profile - bass – Item # VW-37

High profile - Camo With Black Letters – Item # VW-42
High profile - Blaze Orange – Item # VW-43
High profile - Camo With Tan Letters – Item # VW-41
High profile - *Virginia Wildlife* – Item # VW-08
Low profile - *Virginia Wildlife* – Item # VW-09

Item # VW-44

Item # VW-45

Virginia Wildlife T-Shirts

New this year *Virginia Wildlife* T-shirts. Each shirt is 100% cotton and embroidered with the *Virginia Wildlife* logo, and largemouth bass or white-tailed deer. Please specify size, M, L, XL, XXL and color, Grey, Navy, Tan, Teal, or Black when ordering. $12.95

Largemouth Bass – Item # VW-45
White-tailed Deer – Item # VW-44

Custom Walnut Plaque

Display your trophy fish or hunting certificates, as well as other awards, with this custom plaque. Each plaque contains two medallions commissioned by VDGIF. Plaques are available in walnut. $19.95

Item # VW-16

Collectors Patches

The first set in a series to be issued each year. Our 2003 edition has been custom designed exclusively for VDGIF. One patch displays a deer in a woodland setting the other a black bear mother and cub. This first edition is sure to become a valued collectable. $9.95 set of two

Item # VW-54

Item #	Name of Item	Qty.	Size	Color	Price	Total Price

Make checks payable to *Treasurer of Virginia* and mail to: *Virginia Wildlife* Catalog, P.O. Box 11104, Richmond, VA 23230-1104.
Credit card orders can call (804) 367-2569

Subtotal	
Shipping and Handling	**6.95**
Total	

Payment Method

☐ check or money order ☐ VISA ☐ Mastercard

Account Number

Expiration

Signature

Please Print Name

Daytime Phone Number

Shipping Information

Name

Address

City State Zip

Celebrate a special occasion or simply say hello to a good friend with one of the new

Virginia Wildlife greeting cards and prints

"Winter in Virginia" is the first in a series that will showcase Virginia's wildlife throughout the four seasons. Renowned wildlife artist Spike Knuth has captured the unique lives of the cardinal, ruffed grouse, wild turkey and white-tailed deer in this first set. Each box contains 12 cards, three cards per image for only $9.95.

Item# VW-55

Also for the art lover are framable, 11" X 14" prints of each of the "Winter in Virginia" original paintings. The set of four prints is available for $19.95.

Item# VW-56

Devotion

a photo essay by Lee Walker

Night gives way to a bitter cold, colorless black and white morning. The only sounds at that early hour are of the fresh fallen snow crunching under foot. Decoys are spread and a makeshift blind is placed on the edge of a pond along the rolling fields of a country farm. The only thing left to do now is thaw out the goose call and wait.

For Bob Ellis and his chocolate Lab Belle, this is what it's all about. It's a time and place where sleepless nights and dreams come alive. Where memories are born and etched in the mind forever.

A ghostly mist rises from Belle's frozen face. Her body shivers, as she looks skyward. It's a ritual that she and her best friend have shared together many times before.

The silence is suddenly broken and reality quickly sets in, as the sky comes alive with frantic calls and wings spread wide. The first goose drops, tumbling head-over-heels, crashing through a thin sheet of ice covering the pond.

In a flash of flying snow, broken ice and splashing water the retrieve is underway. A task nearly impossible for mere mortals. But for this hunter and his devoted friend—this is what it's all about.

Journal

2003 Outdoor Calendar of Events

Boating Safety Classes: Call 1-800-245-BOAT for class information or visit the VDGIF Web site at www.dgif.state.va.us/boating.

Hunter Education Classes: For a list of classes in your area call (804) 367-1147 or visit the VDGIF Web site at www.dgif.state.va.us/hunting/hunter_education. □

AROUND THE CAMPFIRE

Is It Real?

by Jennifer Worrell

Game wardens Timothy Worrell, Ron Henry and Lieutenant Steve Pike had an interesting night during a Special Law Enforcement Assistance Patrol (SLAP) mission last year in Southampton County. The officers had a decoy deer set up in a field at night, and Officer Worrell and Lt. Pike were working the remote controls to make the deer move. Suddenly a car full of young men pulls up, and the driver illegally shines his headlights on the deer. The officers watch a passenger slip out of the car, open the trunk, and take out what appeared to be a broom handle. They heard all the young men giggling as the would-be hunter crept across the field with the broom over his shoulder. As he tiptoed cautiously, Worrell worked the controls so that the "deer" was moving its head and tail frantically.

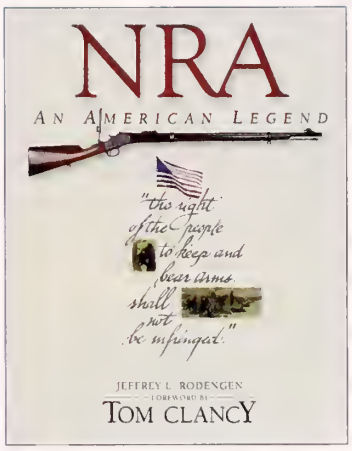
When the "hunter" was about five feet from the decoy, Worrell and Pike had the "deer" shaking its head from side to side so quickly that it nearly fell over. Still the man drew nearer. He drew his "weapon" and clocked the decoy across the head as hard as he could. When the "deer" didn't fall down, he poked it some more before declaring loudly to his friends who were howling with glee by this time, "IT'S A FAKE!"

Realizing there were probably game wardens nearby, the man fled to the car, climbed in, and the driver sped away. Henry followed the car to a nearby residence, watched the men flee inside, and proceeded to make the arrest. Buck fever obviously does strange things to people. □

New River Map

"It's been a long time coming," says George Martin of GMCO Map & Charts of Garrisonville, Virginia. The new "Upper James River: From Scottsville to Richmond," should be one of the most popular maps that the company has ever produced. This waterproof map is a must for anglers, hunters and boaters who frequent this section of the James River. The detail of the Upper James River map is excellent and includes launch areas, rapids and local names, mile markers, a 30 second latitude and longitude grid for GPS use, and notes pointing out ideal routes along the river. You can even write on it to mark your secret fishing hole.

The cost of the Upper James River map is $8.95. They are available at many of your local tackle stores or you can call 1-888-420-6277 or go online at www.gmcomaps.com. □



Book Reviews

by Marika Byrd

NRA: An American Legend
By Jeffrey L. Rodengen with the Foreward by Tom Clancy
Write Stuff Enterprises, Inc.
800/900-2665
www.writestuffbooks.com
ISBN 0-945903-81-2

This writer's earliest experience with the term "NRA" was the National Rehabilitation Association because of my work in that field. Only later did it cause a change to think of NRA as the National Rifle Association when the electronic and print media began providing much information surrounding the issue of gun control.

NRA: An American Legend chronicles the rise of the National Rifle Association from its humble beginnings in 1871 as "a group of New York National Guardsmen who are concerned about marksmanship training and national defense." The time lines show its progression from the Creedmoor Shooting Range and competitions (to hone members

skills in marksmanship) to become the preeminent defender of the Second Amendment of the U. S. Constitution for its citizens "to keep and bear arms and that this right not be infringed."

Throughout the book, which has black and white as well as color photographs—some of which are previously unpublished—it tells of the involvement of military leaders and others who give some credit to the organization for offering and providing programs of skill training in the safe use of firearms, education and leadership that helped defend and preserve our country's freedom over the ages. Some of the same military leaders come back and help in leadership roles within the association.

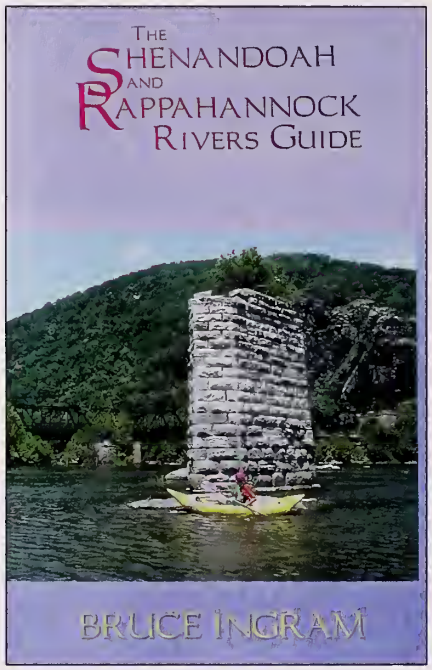
Women and youth have played a part in the growth and leadership of this organization. The outgrowth has been the formation of programs like Becoming an Outdoors Woman©, Crimestrike (Three Strikes and You're Out campaign evolved from this program) and Youth Hunter Education and Challenge are just some of its program development activities.

The appendix recognizes 46 significant donors to the NRA Foundation. "Many significant names in NRA history, the firearms industry, and related manufacturing industries have named Foundation endowments."

The history covers the NRA presidencies from General Ambrose E. Burnside (1871), through Marion P. Hammer, its first lady president (1995) and ending with Charlton Heston (1998).).

The coffee-table book is an essential reference for those staunch defenders of the NRA; it will appeal to avid historians, collectors of firearms, and to anyone interested and committed to our First Freedom. Snippets throughout the book contain interesting morsels of information, which makes it appealing to those less fervent about the NRA.

This is a wonderful gift or stocking stuffer for the upcoming holiday season—although it would need an oversized and reinforced stocking to hang by the chimney with care—for that special someone in your life who enjoys a delightful read. Check it out.



The Shenandoah and Rappahannock Rivers Guide
by Bruce Ingram
Ecopress, P. O. Box 2004, Corvallis, OR 97339
800/326-9272; fax 541-791-2809
Web site: www.ecopress.com
E-mail ecopress@peak.org
184 pages, B&W, with maps
$14.95 ISBN: 1-893272-06-0

Bruce Ingram has another winner on his hands. *The Shenandoah and Rappahannock Rivers Guide* is another in a series about enjoying and "romancing" some of the finest rivers in Virginia and West Virginia—something the writer loves to do as an avocation.

Part 1 briefly describes the four major highland rivers: the James, New, Rappahannock and South Fork of the Shenandoah. Included are places of lodging, restaurants, outfitters, tourism and map contact information for each of the four areas. Also included are fishing tips, the role of birds as fishing and hunting indicators and comments on landowner protected land for posterity.

The rest of the book provides detailed information about trips along segments of the Shenandoah and Rappahannock rivers. Each section begins with "The Essentials," which includes point-to-point sections, the USPS quads, distance, type of rapids, specific access points and what to expect throughout the trip.

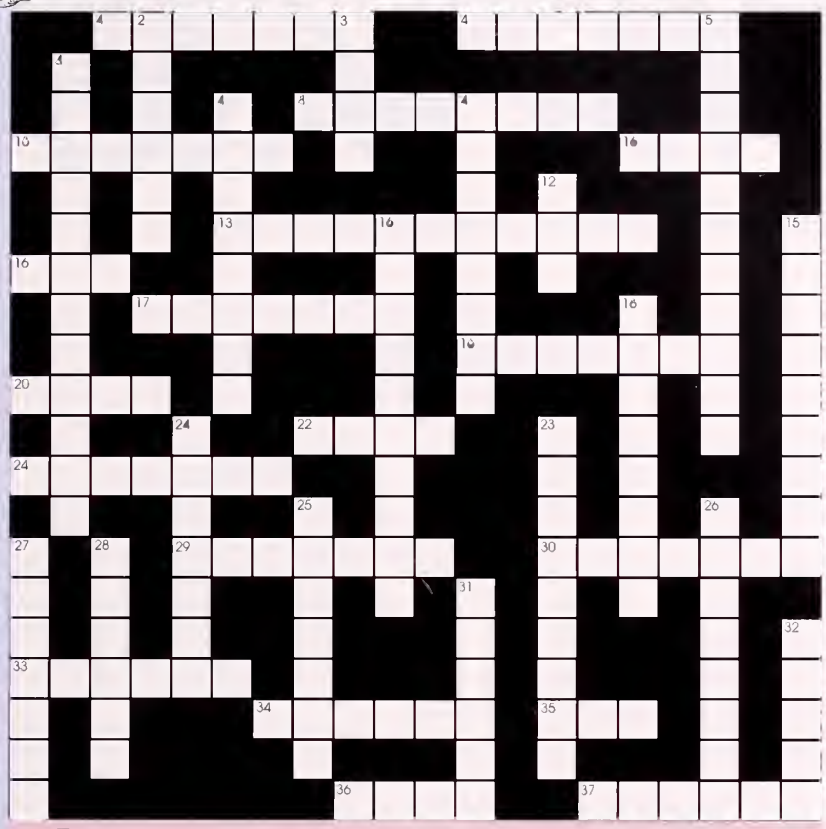
Mingled with the essential information are tidbits about the people, places, and things one can encounter. History is intertwined along the way. Disclosed are the best angling spots, rapids and access points and where to find the best wildlife and scenery

The appendix includes guides, canoe liveries, map, license and fishing regulation, lodging and other information. There are 12 detailed maps.

Grab Ingram's latest offering and plan some time on the water "romancing" the wonderful wildlife, game, and bounties of our earth. Whether it be with a spouse, significant other, friend, or youngsters, we all can learn from our outdoor environment while enjoying its abundance in our own way. □

"Am I seeing things or did that tree just move?"

BYRD NEST CROSSWORD



ACROSS

1 Smallest owl (2 words).
4 Mammal; tree hanger.
8 Rose-breasted ____ ; bird.
10 Common bird of blackbird family.
11 Northern ____ ; fish with long, wide, rounded snout.
13 Three spine fish with tapered ends and bony plates on sides.
16 American ____ ; snake-like fish.
17 Longhorn ____ ; saltwater fish with sharp spines on head and gill covers.
19 Black-faced masked mammal.
20 American ____ ; glossy black bird; heavy bill.
22 Glossy ____ bird; has very long, downward curved bill.
24 Northern ____ ; waterfowl.
29 Eel-like, scaleless fish.
30 Member of mouse/rat family.
33 Owl, night feeder.
34 Northern red-bellied ____ ; turtle family.
35 Barn or great-horned ____ .
36 ____ Fox; member of dog family.
37 Eastern ____ ; American sparrow.

DOWN

2 American ____ ; long, upturned bill shore bird.
3 Common, royal or least ____ ; shore bird.
5 "Muskie," member of pike family.
6 Swallow family member (2 words).
7 Long-tailed sea duck.
9 Bird of thrush family.
12 Longnose ____ ; slender snout, long head.
14 Belted ____ bird with ragged fore/rear crests.
15 Double-crested ____ ; shore bird.
18 Common carp; aquarium fish often released into ponds.
21 Perch family with irregular blackish vertical bars on back sides.
23 Dogfish; pike family; minnow.
25 American, Field or Song ____ ; bird.
26 Crustation resembling lobster.
27 Mockingbird family; mostly slary grey.
28 Semi-aquatic rodent with rat-like features.
31 Rapter of the hawk and eagle family.
32 Sandhill ____ ; long-necked and long-legged wader.

An excellent resource for solving this puzzle is the *National Audubon Society Field Guide to the Mid-Atlantic States.*

(Answers in February 2004 Virginia Wildlife magazine)

Marika Byrd is a freelance writer, crossword aficionado, and member of the Virginia Outdoor Writers Association, Inc.

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On The Water

by Jim Crosby

A Boaters Christmas Gift

Recreational and commercial boaters in the U.S. received a Christmas present in 1980. The book, compliments of the Coast Guard, is designed to make boating in this country just a little safer by establishing rules for navigation. Unfortunately, far too many recreational boaters are totally unaware of the gift or its significance to them. I refer to it as a gift only to the extent of the information contained therein because the publication has to be purchased.

The current version of the Inland Navigation Rules were enacted by law on December 24, 1980, and became effective for all inland waters, except the Great Lakes, on December 24, 1981. They became effective on the Great Lakes on March 1, 1983. In 1993, the International Maritime Organization adopted amendments to the 1972 version of their International Regulations for Prevention of Collisions at Sea (72 COLREGS). These amendments became effective in November of 1995. The U.S. Coast Guard revised the Inland Navigation Rules to reflect the COLREGS amendments. Additionally, the Coast Guard adopted changes to the Inland Navigation Rules to bring them into conformity with the COLREGS. Some differences, however, still remain between the International and Inland Rules.

Do these rules affect you? You decide.

Under Inland Part A – General
Rule 1 – Application

"(a) These Rules apply to all vessels upon the inland waters of the United States, and to vessels of the United States on the Canadian waters of the Great Lakes to the extent that there is no conflict with Canadian law."

Rule 2 – Responsibility

"(a) Nothing in these Rules shall exonerate any vessel, or the owner, master, or crew thereof, from the consequences of any neglect to comply with these Rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case."

What do you think?

Rule 3 – General Definitions

"(a) The word "Vessel" includes every description of watercraft, including nondisplacement craft and seaplanes, used or capable of being used as a means of transportation on water."

Does this sound like a publication that you should have, read and keep aboard? If you think so, it might make a great Christmas gift to your vessel.

It contains steering and sailing rules that set forth the responsibility for maintaining a proper lookout, defines a safe speed, risk of collision, action to avoid collision, operation in narrow channels, and traffic separation schemes.

It specifies the conduct of vessels in sight of one another by establishing the relationship between power-driven vessels and sailing vessels, defines responsibilities for overtaking, approaching head-on and crossing the path of another vessel.

It contains the responsibilities between vessels in all navigational situations, as well as, sets forth the specifications for vessel lights, sound signals, light signals and day shapes.

It sets forth, under Sound and Light Signals, definitions, equipment for sound signals, maneuvering and warning signals, sound signals in restricted visibility, signals to attract attention and distress signals.

Have I sparked your interest yet? The only reason I can think of for not having and reading a copy of the U.S. Coast Guard Navigation Rules could be that you boat only on sole state waters—a body of water where only local law enforcement officers patrol and enforce only state laws and regulations. If you fit that category, you can obtain a copy of Virginia's Boating Safety Regulations from the Virginia Department of Game and Inland Fisheries, P.O. Box 11104, Richmond, VA 23230-1104, or view them on the Web at www.dgif.state.va.us.

However, if you venture out where the Coast Guard patrols, you need a copy of the Navigation Rules published by the Government Printing Office. The book is available by mail from: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The current retail price is $15.00. The book can also be obtained from marine supply centers and marinas, as well as online from www.gpo.gov. □

RECIPES

by Joan Cone

The Pressure Cooker–Ideal For Game

Over many years I have had a long and happy experience with pressure cookers. They are an efficient time saver and cook three to ten times faster. It eliminates the par boiling of small game and tenderizes cuts of big game.

Menu

Gingersnap Rabbit For Pressure Cooker
Cranberry Apple Sweet Potato Packet
Fresh Orange Cabbage Wedges
Cheesy Crescents
Streusel Topped Pumpkin Pie

Gingersnap Rabbit for Pressure Cooker

1 rabbit, cut into serving pieces
Flour
Salt to taste
3 tablespoons vegetable oil
1 cup water
¼ cup vinegar
1 onion, sliced
1 bay leaf
1 cup (8 ounces) sour cream
5 to 8 gingersnaps, crumbled

Dredge rabbit pieces in flour to which salt has been added. Brown rabbit in hot fat in cooker. Add water, vinegar, onion and bay leaf. Close cover securely and cook under 15 pounds pressure for 20 minutes or until tender. Reduce pressure instantly. Add sour cream and 5 crumbled gingersnaps. Cook until thick and smooth, stirring constantly. If sauce is not thick enough, add rest of crumbled gingersnaps. Serves 3.

Cranberry Apple Sweet Potato Packet

1 sheet (18x24-inches) heavy duty aluminum foil
4 medium sweet potatoes, peeled and cut into ¼-inch slices
2 Granny Smith apples, cored, thinly sliced into rings
½ cup dried cranberries or raisins
½ cup packed brown sugar
3 tablespoons butter or margarine, melted
½ teaspoon ground cinnamon

Preheat oven to 450° F. Center sweet potatoes, apples and cranberries on sheet of foil. Sprinkle with brown sugar. Combine butter and cinnamon and drizzle over top. Bring up foil sides. Double fold top and ends to seal making one large foil packet, leaving room for heat circulation inside. Bake 25 to 30 minutes on a cookie sheet in oven. Makes 5 to 6 servings.

Fresh Orange Cabbage Wedges

1 medium head cabbage, cored, cut in 6 wedges
Boiling water
¼ cup sliced green onions
2 tablespoons butter or margarine
1 teaspoon prepared horseradish
Grated peel of fresh orange
¼ cup orange juice
2 oranges, peeled, cut in half-cartwheel slices
1 to 2 tablespoons grated Parmesan cheese

In large saucepan, cook cabbage, covered, in 1-inch boiling water until tender, 7 to 8 minutes; drain well. Remove cabbage to serving plate and keep warm. In saucepan, sauté green onion in butter. Stir in horseradish, orange peel and juice. Add oranges and heat. Serve over cabbage. Sprinkle with Parmesan cheese. Makes 6 servings.

Cheesy Crescents

1 package refrigerator crescent rolls
Sliced Swiss cheese
Sesame seeds (optional)

Open rolls according to package directions. Cut cheese to fit into rolls. Roll up and generously sprinkle top of rolls with sesame seeds. Bake according to package directions. Makes 8 rolls.

Streusel Topped Pumpkin Pie

1 can (15 ounces) pumpkin
1 can (14 ounces) sweetened condensed milk
1 egg
1¼ teaspoons ground cinnamon
½ teaspoon each ground ginger, nutmeg and salt
1 (6 ounce) graham cracker pie crust
¼ cup firmly packed brown sugar
2 tablespoons flour
2 tablespoons cold butter or margarine
¾ cup chopped walnuts

Preheat oven to 425° F. Combine pumpkin, sweetened condensed milk, egg, ¾ teaspoon cinnamon, ginger, nutmeg and salt. Mix well. Pour into pie crust. Bake 15 minutes. Reduce heat to 350° F. Combine sugar, flour and remaining ½ teaspoon cinnamon. Cut in butter until crumbly. Stir in walnuts. Sprinkle streusel mixture over pie. Bake 40 minutes or until set. Serve warm or at room temperature. Refrigerate leftovers. Serve with whipped cream or whipped topping if desired. Makes 6 to 8 servings. ☐

Virginia's Finest

Naturally Wild

story and illustration
by Spike Knuth

Red-breasted Merganser
Mergus serrator

Virginia has three kinds of mergansers; the hooded, which is the smallest; the red-breasted, which is medium sized, and the common or American, which is the largest. Mergansers have narrow, cylindrical bills with fine serrated, or sawtooth edges that angle backward, giving rise to the nickname "sawbill," or "bec scie," as it is known in Cajun Louisiana. The toothy edges enable them to catch and grasp slippery fish, their main food and the reason they are referred to as "fish ducks." These birds are excellent swimmers and divers, and very quick underwater.

Other than size, and of course, colors and markings, the three merganser types are somewhat separated by their favored habitat. Hooded and common mergansers tend to like the tree-edged marshes, lakes and ponds, although you will see them in open water or backwater sloughs of tidal rivers, but mainly in fresh or brackish waters. Red-breasted mergansers have a definite affinity to saltier waters and are common off the ocean coasts in winter. They will come into the bigger rivers and river mouths emptying into salt water.

The red-breasted merganser is a little larger than the hooded, with a longer neck, head and bill. It shows a lot of white on its wings in flight. The adult male has a double-crested, metallic-green head, a red bill, a white neck collar and a reddish-brown breast marked with black and white, white flanks and a dark back. The hen is dressed in browns and grays. She has a double-crested, reddish-brown, head blending to a whitish chin and throat. They have red bills and feet.

These mergansers like the salt water more, and most are seen on the ocean. However, many will come up the big tidal rivers or spend time in the brackish marshes and bays. Most of them go farther south to winter off Florida. I recall one year seeing a flock of what must have been two or three thousand, wintering on the Gulf of Mexico off Destin, Florida. They fly low over the water, often in a line, but sometimes in undisciplined bunches. When on migration they fly at greater heights.

Most red-breasted mergansers will head north in March and April. They generally nest farther north than the other mergansers, near fresh water lakes or rivers, in upturned tree roots, driftwood or overhanging shoreline vegetation. They are at home in moving water and frequently feed in fast-moving rivers.

Red-breasted mergansers orient more to saltier water so check lower areas of the York, Potomac, Rappahannock and Piankatank rivers, around the Bay Bridge Tunnel, off Kiptopeke State Park and all parts of the Chesapeake Bay. □

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